

Title (en)

Communication signal processors and methods compatible with a variety of modulation types

Title (de)

Kommunikationssignalprozessoren und -methoden, die mit unterschiedlichen Modulationsarten kompatibel sind

Title (fr)

Processeurs et méthodes de communication de signaux compatibles avec plusieurs types de modulation

Publication

**EP 0847169 A3 20001206 (EN)**

Application

**EP 97121019 A 19971129**

Priority

US 76110396 A 19961205

Abstract (en)

[origin: EP0847169A2] A digital signal processor (20) is provided which is compatible with a large variety of modulation processes (e.g., BPSK, QPSK, pi /4 PSK, M-ary FSK and M-ary PSK). The processor has a transmit section (40) which can convert input data streams into baseband I and Q signals and a receive section (60) which can recover data streams from input baseband I and Q signals. The transmit section includes a direct I/Q modulator (46) and a common phase modulator (44) and the receive section includes an M-FSK to M-PSK converter (350) and a common phase demodulator (72). The processor is particularly suited for realization as an application-specific integrated circuit (ASIC) which can be integrated in multiband, multimode transceivers. <IMAGE>

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IPC 8 full level

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Citation (search report)

- [Y] US 4562415 A 19851231 - MCBILES CAROL D [US]
- [Y] US 5574399 A 19961112 - OURA HIDETO [JP], et al
- [A] US 5473637 A 19951205 - GARDNER STEVEN H [US]
- [A] US 4885756 A 19891205 - FONTANES SYLVAIN [FR], et al

Cited by

KR100751169B1; EP1830531A1; USRE41774E; EP0980150A3; AU755312B2; CN110138699A; CN104410595A; KR100739011B1; EP1392030A3; EP1830532A1; EP1164739A1; FR2810479A1; US6690751B1; EP1026863A3; CN110971550A; US7912144B2; US6658067B1; US8009775B2; US8401503B2; US6363106B1; WO0150631A3; WO2006099532A3; WO0062498A1; WO0003523A1; WO0223843A1; WO9946866A1; US6185259B1; US6798850B1; WO0051376A1; WO9956442A3; US7095818B2; USRE43204E

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